

ABSTRACT

A sensor apparatus and method are disclosed herein. A base is generally located proximate to a cover. A sensor element (e.g., quartz, silicon, ceramic, and the like) can be located on the base, such that the cover and the base form a clearance between the cover and the base. The clearance can be configured such that when the cover is at its smallest dimension within the tolerance range thereof and the base is at its largest dimension within the tolerance range thereof there is a clearance between them. Additionally, a sensor diaphragm and a dimple can be incorporated into the cover, wherein the dimple is in intimate contact with the sensor element at all pressure levels and temperatures thereof.